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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/542,223

07/14/2005

Olli Tiitu

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EXAMINER

GRAVINI, STEPHEN MICHAEL

ART UNIT

PAPER NUMBER

3749

MAIL DATE

DELIVERY MODE

07/15/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/542,223	<b>Applicant(s)</b> TIITU, OLLI	
	<b>Examiner</b> Stephen Gravini	<b>Art Unit</b> 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 102***

Claims 1-2 and 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Rasanen (US 6,415,527). The claims are reasonably and broadly construed, in light of the accompanying specification, to be disclosed in Rasanen as comprising:

a cylindrical rotatable drum **11** provided with a steam pipe system **12** comprising a heat transfer element **17**, to be rotated with the drum, the heat transfer element being detachable from and mountable on the drum (please see column 4 line 10), whereby material to be dried is fed to a first end of the drying apparatus as disclosed on page 4 lines 4-20 of that reference, the material being arranged to be discharged through a second end of the drying apparatus, wherein the heat transfer element is formed as a uniform packet of several longitudinal pipes **12a**, **12a'** arranged in an axial direction of the cylindrical rotatable drum and connecting pipes between them in such a way that the structure of the heat transfer element is self-supported by a support structure **13**, **14** that is structurally connected to the longitudinal pipes and the support structure and is attached to the drum frame with fastening that allows heat expansion (please see column 4 line 42 for the heat expansion teaching. Rasanen also discloses the claimed feature wherein the heat transfer element is formed as a sector-shaped packet **28** in such a way that the heat transfer element several longitudinal pipes at the edges of the element and of connecting pipes connecting them together as shown in figure 1,

wherein there is a steam pressure vessel at the end of the drum of the steam drier and at least one steam manifold at the end of the heat transfer element, and the steam manifold is connected to the steam pressure vessel with a connecting pipe **18** wherein the diameter of the steam pressure vessel extends to the area of the heat transfer elements as shown in figure 3.

### ***Claim Rejections - 35 USC § 103***

Claims 3-4 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasanen in view of Asman (US 4,417,661). Rasanen discloses the claimed invention as rejected above, except for the claimed abrasion resistant plate and protection plate. Asman, another drying apparatus, discloses an abrasion resistant plate and protection plate at column 2 line 54 through column 4 line 68. It would have been obvious to one skilled in the art to provide the teachings of Rasanen with the abrasion resistant plate and protection plate, as disclosed in Asman, for the purpose of minimizing wear and damage to a drying apparatus during operations and intended uses in the field of drying.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-8 have been considered but are not persuasive.

Applicant's arguments seem to define the invention over the prior art, however it is the claimed invention that determines patentability. In this application, the invention changed the recited "coupled" to now recite "that is structurally connected." Under the current Office practice of reasonably and broadly construing claims over the prior art, in

light of the specification, both those recitations are patentably the same, such that the anticipatory rejections is believed proper and maintained.

It is suggested that the heat transfer element with a support element fastened in a rigid or fixed manner (consistent with the specification meaning), be recited to overcome the teachings of the prior art.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gravini whose telephone number is 571 272 4875. The examiner can normally be reached on normal weekday business hours (east coast time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven B. McAllister can be reached on 571 272 6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3749

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen Gravini/  
Primary Examiner, Art Unit 3749